

Modes of Financial Support in the Graduate Education of Science and Engineering Doctorate Recipients

Topical Report

**Division of Science Resources Studies
Directorate for Social, Behavioral, and
Economic Sciences**



National Science Foundation

May 2000

Modes of Financial Support in the Graduate Education of Science and Engineering Doctorate Recipients

Topical Report

Mark Morgan
Quantum Research Corporation

Joan Burrelli
Alan Rapoport

Division of Science Resources Studies
Directorate for Social, Behavioral, and
Economic Sciences



ACKNOWLEDGMENTS

This report was prepared by Mark Morgan of Quantum Research Corporation (QRC), Joan Burrelli, of the Human Resources Statistics Program (HRS), Division of Science Resources Studies (SRS), NSF; and Alan Rapoport, of the Integrated Studies Program (ISP), Division of Science Resources Studies, NSF. Review and guidance were provided by Mary A. Golladay, HRS Program Director, by Rolf F. Lehming, ISP Program Director, by Ronald S. Fecso, Chief Statistician, SRS, and by Mary J. Frase, Deputy Division Director, SRS.

Text, analysis, tabulations and charts from the Survey of Earned Doctorates were prepared for the National

Science Foundation under contract by Mark Morgan, QRC. George Nozicka of QRC provided early guidance in the analysis and organization of data. The following were members of the review committee for this report: Susan Hill, Paul W. Jennings, Jean Johnson, and Nirmala Kannankutty of NSF and Paula Knepper of the National Center for Education Statistics. Susan Hill served as facilitator of the review committee. Editorial services were provided by the SRS Publications Manager, Anne M. Houghton and by Nita Congress. Julia Harriston of SRS provided editorial and composition services. Phillip Coons and Diane Dietrich of ROH, Inc., provided composition and page layout services.

CONTENTS

<i>Section</i>	<i>Page</i>
EXECUTIVE SUMMARY	vii
Number of Support Modes Used	vii
Prevalence of Modes of Support.....	vii
Combinations of Modes of Support	viii
INTRODUCTION	1
Reasons for Interest in Graduate Student Support.....	1
U.S. S&E Graduate Education	1
The Government Performance and Results Act	2
Study Data: Strengths and Limitations	2
Organization of This Report	3
NUMBERS OF SUPPORT MODES USED	5
Modes of Support.....	5
Primary Mode of Support.....	6
Secondary Mode of Support	9
Number of Support Modes by Sex	9
Number of Support Modes by Race/Ethnicity and Citizenship.....	10
Number of Support Modes by Control and Research Emphasis of Institutions	10
PREVALENCE AND COMBINATIONS OF SUPPORT MODES	15
Sex, Race/Ethnicity, and Citizenship	16
Sex	16
Race/Ethnicity and Citizenship Status	16
Institutional Characteristics	26
Institutional Control	26
Carnegie Institutional Classification	28
CONCLUSION.....	31
REFERENCES	33
APPENDIX A – TECHNICAL NOTES	A-1
Survey Description.....	A-1
Missing Data	A-1
Validity of Data on Sources of Support	A-1
Data Recodes	A-1
Exhibit A	
Exhibit B	